



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

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REPLY TO THE ATTENTION OF:

HRE-8J

April 21, 1993

Mr. Mike Wells
Vice President
Elecpac Division of Wilbrecht Electronics, Inc.
740 Industrial Drive, Suite D
Cary, Illinois 60013

Re: Visual Site Inspection
Elecpac Division of
Wilbrecht Electronics, Inc.
Cary, Illinois
ILD 049 010 564

Dear Mr. Wells:

The U.S. Environmental Protection Agency is enclosing a copy of the final Preliminary Assessment/Visual Site Inspection (PA/VSI) report for the referenced facility. The executive summary and conclusions and recommendations sections have been withheld as Enforcement Confidential.

If you have any questions, please call Francene Harris at (312) 886-2884.

Sincerely yours,

Kevin M. Pierard, Chief
Minnesota/Ohio Technical Enforcement Section
RCRA Enforcement Branch



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

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REPLY TO THE ATTENTION OF:

HRE-8J

December 14, 1992

Mike Wells
Vice President of Operations
Elecpac Division of Wilbrecht Electronics, Inc.
740 Industrial Drive
Suite D
Cary, IL 60013

Re: Visual Site Inspection
Elecpac Division of Wilbrecht Electronics, Inc.
Cary, IL
ILD 049 010 564

Dear Mr. Wells:

The United States Environmental Protection Agency (U.S. EPA) Region V will conduct a Preliminary Assessment including a Visual Site Inspection (PA/VSI) at the referenced facility. This inspection is conducted pursuant to the Resource Conservation and Recovery Act, as amended (RCRA) Section 3007 and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA) Section 104(e). The referenced facility has generated, treated, stored, or disposed of hazardous waste subject to RCRA. The PA/VSI requires identification and systematic review of all solid waste streams at the facility. The objective of the PA/VSI is to determine whether or not releases of hazardous wastes or hazardous constituents have occurred or are occurring at the facility which may require further investigation. This analysis will also provide information to establish priorities for addressing any confirmed releases.

The visual site inspection of your facility is to verify the location of all solid waste management units (SWMUs) and areas of concern (AOCs) to make a cursory determination of their condition by visual observation. The definitions of SWMUs and AOCs are included in Attachment I. The VSI supplements and updates data gathered during a preliminary file review. During this site inspection, no samples will be taken. A sampling visit to ascertain if releases of hazardous waste or constituents have occurred may be required at a later date.

Assistance of some of your personnel may be required in reviewing solid waste flow(s) or previous disposal practices. The site inspection is to provide a technical understanding of the present and past waste flows and handling, treatment, storage, and disposal practices. Photographs of the facility are necessary to document the condition of the units at the facility and the waste management practices used.

The VSI has been scheduled for 8:30 a.m. on December 21, 1992. The inspection team will consist of Kurt Whitman and Keith Foszcz of PRC Environmental Management, Inc., a

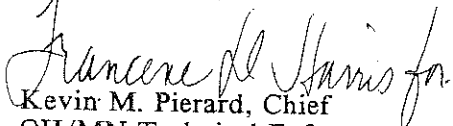
December 14, 1992
Page 2

contractor for the U.S. EPA. Representatives of the Illinois Environmental Protection Agency (IEPA) may also be present. Your cooperation in admitting and assisting them while on site is appreciated.

The U.S. EPA recommends that personnel who are familiar with present and past manufacturing and waste management activities be available during the VSI. Access to any relevant maps, diagrams, hydrogeologic reports, environmental assessment reports, sampling data sheets, environmental permits (air, NPDES), manifests and/or correspondence is also necessary, as such information is needed to complete the PA/VSI.

If you have any questions, please contact me at (312) 886-4448 or Francene Harris at (312) 886-2884. A copy of the Preliminary Assessment/Visual Site Inspection Report, excluding the conclusions and Executive Summary portion will be sent when the report is available.

Sincerely yours,



Kevin M. Pierard, Chief
OH/MN Technical Enforcement Section

Enclosure

cc: Mr. Larry Eastep, IEPA

ATTACHMENT I

The definitions of solid waste management unit (SWMU) and area of concern (AOC) are as follows.

A SWMU is defined as any discernable unit where solid wastes have been placed at any time from which hazardous constituents might migrate, regardless of whether the unit was intended for the management of a solid or hazardous waste.

The SWMU definition includes the following:

- RCRA regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that U.S. Environmental Protection Agency has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents, such as wood preservative treatment dripping areas, loading or unloading areas, or solvent washing areas

An AOC is defined as any area where a release to the environment of hazardous wastes or constituents has occurred or is suspected to have occurred on a nonroutine or nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.

PRC requests that, if available, the following facility information be provided during the VSI:

1. Two copies of a detailed map of the facility
2. Facility history, including dates of operation, ownership changes, and production processes
3. Current facility operations
4. Processes that generate waste that is treated, stored, or disposed of at the facility
5. Records of disposal of wastes generated at the facility (manifests, annual reports, etc...)
6. Security at the facility
7. Information regarding geology and the uses of ground water and surface water in the area
8. Permits (air, NPDES, etc...) the facility currently holds or has held in the past and documentation of any permit violations that may have occurred
9. Records of any spills that may have occurred at the facility
10. Descriptive operational information (location, dimensions, capacity, materials of construction, etc...), dates of start-up and closure, wastes managed, release controls, and release history for each SWMU

PRC Environmental Management, Inc.
233 North Michigan Avenue
Suite 1621
Chicago, IL 60601
312-856-8700
Fax 312-938-0118



**PRELIMINARY ASSESSMENT/
VISUAL SITE INSPECTION**

**ELECPAC DIVISION OF WILBRECHT ELECTRONICS, INC.
CARY, ILLINOIS
ILD 049 010 564**

FINAL REPORT

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460**

| | | |
|-----------------------------|---|--|
| Work Assignment No. | : | C05087 |
| EPA Region | : | 5 |
| Site No. | : | ILD 049 010 564 |
| Date Prepared | : | March 9, 1993 |
| Contract No. | : | 68-W9-0006 |
| PRC No. | : | 009-C05087IL8J |
| Prepared by | : | PRC Environmental Management, Inc. (Kurt Whitman) |
| Contractor Project Manager | : | Shin Ahn |
| Telephone No. | : | (312) 856-8700 |
| EPA Work Assignment Manager | : | Kevin Pierard |
| Telephone No. | : | (312) 886-4448 |

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- A EPA PRELIMINARY ASSESSMENT FORM 2070-12
- B VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS
- C VISUAL SITE INSPECTION FIELD NOTES

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RELEASED 7/18/00
DATE _____
RIN # _____
INITIALS WV

EXECUTIVE SUMMARY

ENFORCEMENT
CONFIDENTIAL

PRC Environmental Management, Inc. (PRC), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Elecpac Division of Wilbrecht Electronics, Inc. (Elecpac), facility in Cary, McHenry County, Illinois. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from SWMUs identified. In addition, a completed U.S. Environmental Protection Agency (EPA) Preliminary Assessment Form (EPA Form 2070-12) is included in Attachment A to assist in prioritizing RCRA facilities for corrective action.

The Elecpac facility manufactures metal hermetic seals for electronic applications. Preformed metal components of the hermetic seals are delivered to the facility prior to assembly. Some of the preformed metal components are machined before they are put through a glass fusion process in a high temperature furnace. The assembled product is then copper, nickel, or tin electroplated or potted with tin solder.

The facility generates and manages the following waste streams: (1) spent EN™ strip solution (F006); (2) spent copper strip solution (F006); (3) spent nickel strip solution (F006); (4) spent nitric acid (D002 and D006); (5) spent potassium permanganate solution (D002); (6) spent petroleum naphtha (D001); (7) spent methanol (F003); (8) spent methyl ethyl ketone (F003); (9) spent 1,1,1-trichloroethane (F001); (10) nonhazardous or hazardous (F006) spent plating bath drippings; (11) nonhazardous spent lapping oil and paraffin-based solvents; and (12) nonhazardous spent wash light oils.

In the past, the facility generated and managed the following waste streams: (1) spent perchloroethylene (F001); (2) spent cyanide plating solution (D002 and F007); (3) spent chromic acid (D002 and D007); (4) nonhazardous spent electroless nickel solution; and (5) nonhazardous spent nickel sulfamate solution (nonhazardous).

The facility has operated at its current location since 1981, when Elecpac moved from its previous location at 15 West Main Street. Elecpac never submitted a new Notification of Hazardous Waste Activity form, as required by the EPA. Elecpac has used the same generator identification number even though the operation at 15 West Main Street was discontinued.

The facility occupies about 0.2 acre in a mixed-use area and employs about 55 people. The facility's current regulatory status is that of a large-quantity generator and treatment facility

of hazardous waste. Elecpac is a wholly owned subsidiary of Wilbrecht Electronics, Inc., of St. Paul, Minnesota.

The PA/VSI identified the following five SWMUs at the facility:

Solid Waste Management Units

1. Atmospheric Evaporator and Tank
2. Waste Plating Drippings Holding Pit
3. Drum Storage Area (DSA)
4. Former North DSA
5. Former South DSA

RELEASED *7/18/85*
DATE *7/18/85*
RIN # *clv*
INITIALS *clv*

SWMUs 1 through 5 have a low potential for release because they have adequate containment to prevent off-site release to environmental media. On August 15, 1985, the Illinois Environmental Protection Agency (IEPA) approved the certified RCRA-clean closure of SWMUs 4 and 5. SWMU 1 is a RCRA-treatment unit and the facility does not have a permit to operate the unit. SWMU 1 was not identified on the Facility's RCRA Part A Permit Application.

The nearest surface water body is a Village of Cary pond in Jaycee Park, about 0.2 mile northeast of the facility and is used for recreational purposes. Other surface water bodies near the facility include Lake Killarney, which is about 1.3 miles north; Cary Creek, which is about 1.4 miles southeast; and the Fox River, which is about 1.7 miles south. All surface drainage flows west into a retention pond situated at the west end of Industrial Drive. The nearest residence is about 0.1 mile south of the facility. The nearest upgradient ground-water well is about 0.5 mile south to southwest of the facility and the nearest downgradient ground-water well is about 1 mile south to southeast. These wells are used for drinking water, industrial, and municipal purposes. All water for the Village of Cary is supplied by city-owned ground-water wells.

PRC recommends that Elecpac seal the cracks in the concrete and construct a berm around SWMU 3 to prevent the potential off-site migration of hazardous substances and wastes. PRC recommends that the facility apply for a RCRA treatment permit for SWMU 1. PRC recommends that no further action be taken for SWMUs 2, 4, and 5 at this time.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. C05087 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has usually exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading or unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release of hazardous waste or constituents to the environment has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where a strong possibility exists that such a release might occur in the future.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility
- Obtain information on the operational history of the facility
- Obtain information on releases from any units at the facility
- Identify data gaps and other informational needs to be filled during the VSI

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA
- Identify releases not discovered during the PA
- Provide a specific description of the environmental setting
- Provide information on release pathways and the potential for releases to each medium
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases

The VSI includes interviewing appropriate facility staff; inspecting the entire facility to identify all SWMUs and AOCs; photographing all visible SWMUs; identifying evidence of releases; making a preliminary selection of potential sampling parameters and locations, if needed; and obtaining additional information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the Elecpac Division of Wilbrecht Electronics, Inc. (Elecpac), facility (EPA Identification No. ILD 049 010 564) in Cary, McHenry County, Illinois. The PA was completed on December 30, 1992. PRC gathered and reviewed information from the Illinois Environmental Protection Agency (IEPA), Federal Emergency Management Agency (FEMA), U.S. Department of Agriculture (USDA), National Wildlife Inventory (NWI), U.S. Geological Survey (USGS), Illinois State Geological Survey (ISGS), and from EPA Region 5 RCRA files. The VSI was conducted on January 4, 1993. It included interviews with facility representatives and a walk-through inspection of the facility. PRC identified five SWMUs at the facility.

PRC completed EPA Form 2070-12 using information gathered during the PA/VSI. This form is included in Attachment A. The VSI is summarized and six inspection photographs are included in Attachment B. Field notes from the VSI are included in Attachment C.

2.0 FACILITY DESCRIPTION

This section describes the facility's location; past and present operations; waste generating processes and waste management practices; history of documented releases; regulatory history; environmental setting; and receptors.

2.1 FACILITY LOCATION

The Elecpac facility is located at 740 Industrial Drive in Cary, McHenry County, Illinois. Figure 1 shows the location of the facility in relation to the surrounding topographic features (latitude 42°12'51" N and longitude 88°15'28" W). The facility occupies about 0.2 acre in a mixed-use area.

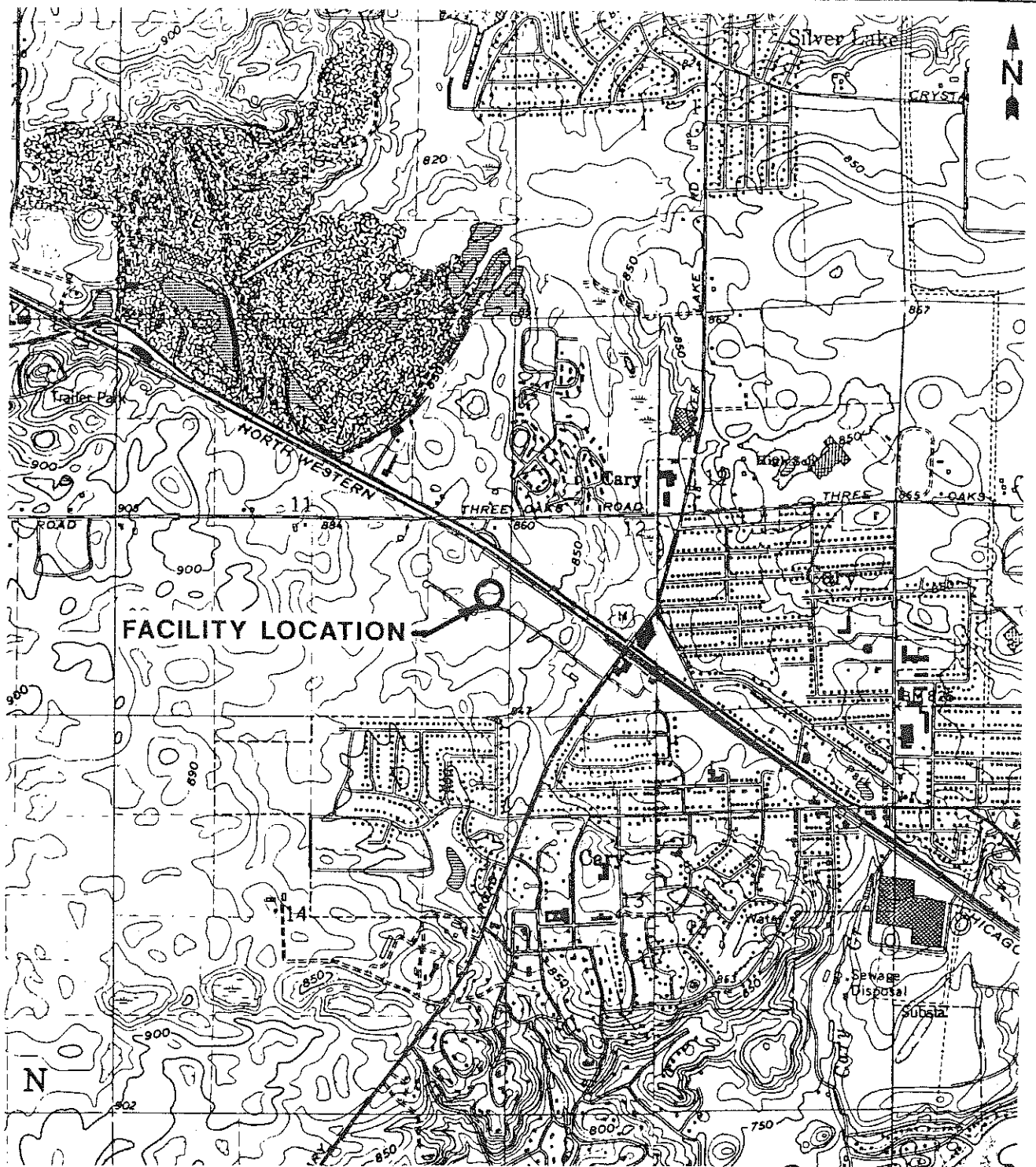
The facility is bordered on the north-northeast by Sea Quest Pumps, Inc., a plastic valve and fittings manufacturer; on the west by three machine shops: General Assembly and Manufacturing Corporation, D.C. Engineering and Manufacturing Company, and IL Blower, Inc.; on the south by GLS Plastics, a plastic parts manufacturer; and on the east by an office/warehouse complex.

2.2 FACILITY OPERATIONS

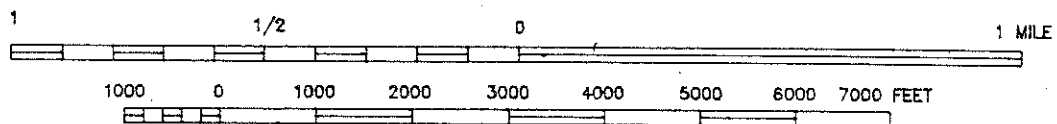
The Elecpac facility manufactures metal hermetic seals for electronic applications. Preformed metal components of the hermetic seals are delivered to the facility prior to assembly. Some of the preformed metal components are machined before they are put through a glass fusion process in a high temperature furnace. The assembled product is then copper, nickel, or tin electroplated or potted with tin solder. Raw materials include acids, alkalis, electroplating solutions, petroleum naphtha, methanol, methyl ethyl ketone, 1,1,1-trichloroethane, lapping oil, resins, Mobil DTE™ light oil, steel, and glass inserts for the seals.

Elecpac has operated at the facility since 1981 and employs about 55 people. Elecpac moved to its current location in 1981 from 15 West Main Street, Cary, Illinois. The total square footage for the facility under roof is 180,000 (Elecpac, 1992). Parking lots are on the north-northwest side of the facility.

Elecpac has been in continuous operation as an electroplating facility since 1981. Since 1970, Elecpac has been a wholly owned division of Wilbrecht Electronics, Inc., St. Paul, Minnesota. Elecpac leases the building from Gordon Strong and Company, Chicago, Illinois (Elecpac, 1985).



SCALE 1:24000



SCALE 1"=2,000'



QUADRANGLE LOCATION

SOURCE: MODIFIED FROM USGS, CRYSTAL LAKE AND BARRINGTON QUADRANGLES, 1980

ELECPAC DIVISION OF WILBRECHT
ELECTRONICS, INC.
CARY, ILLINOIS

FIGURE 1
FACILITY LOCATION

PRC ENVIRONMENTAL MANAGEMENT, INC.

2.3

WASTE GENERATION AND MANAGEMENT

The primary waste generating processes at the Elecpac facility include the following: (1) an electroplating operation; (2) a machining operation; and (3) a parts cleaning operation.

Since 1981, the facility has generated and managed the following waste streams: (1) spent EN™ strip solution (F006); (2) spent copper strip solution (F006); (3) spent nickel strip solution (F006); (4) spent nitric acid (D002 and D006); (5) spent potassium permanganate solution (D002); (6) spent petroleum naphtha (D001); (7) spent methanol (F003); (8) spent methyl ethyl ketone (F003); (9) spent 1,1,1-trichloroethane (F001); (10) nonhazardous or hazardous (F006) spent plating bath drippings; (11) nonhazardous spent lapping oil and paraffinic-based solvents; and (12) nonhazardous spent wash light oils.

In the past, the facility generated and managed the following waste streams: (1) spent perchloroethylene (F001); (2) spent cyanide plating solution (D002 and F007); (3) spent chromic acid (D002 and D007); (4) nonhazardous spent electroless nickel solution; and (5) nonhazardous spent nickel sulfamate solution.

Wastes are generated and managed at various locations at the facility. SWMUs and their current status are identified in Table 1. The locations of SWMUs in relation to the facility layout are shown on Figure 2. Wastes generated at the facility are summarized in Table 2. Current annual waste generation data is based on the years 1991 or 1992. Facility generation and management of both hazardous and nonhazardous wastes are discussed below.

Spent EN™ strip solution (F006), spent copper strip solution (F006), and spent nickel strip solution (F006) (combined total of about 900 gallons per year), generated by the electroplating operation, are stored and accumulated in drums at the Drum Storage Area (DSA) (SWMU 3) or are evaporated and reclaimed at the Atmospheric Evaporator and Tank (SWMU 1). Spent EN™, copper and nickel strip solutions (F006) are transported off-site by Solvent Systems International, Inc., of Hampshire, Illinois, for recycling at CP Inorganics, of Joliet, Illinois (Elecpac, 1991 or 1992).

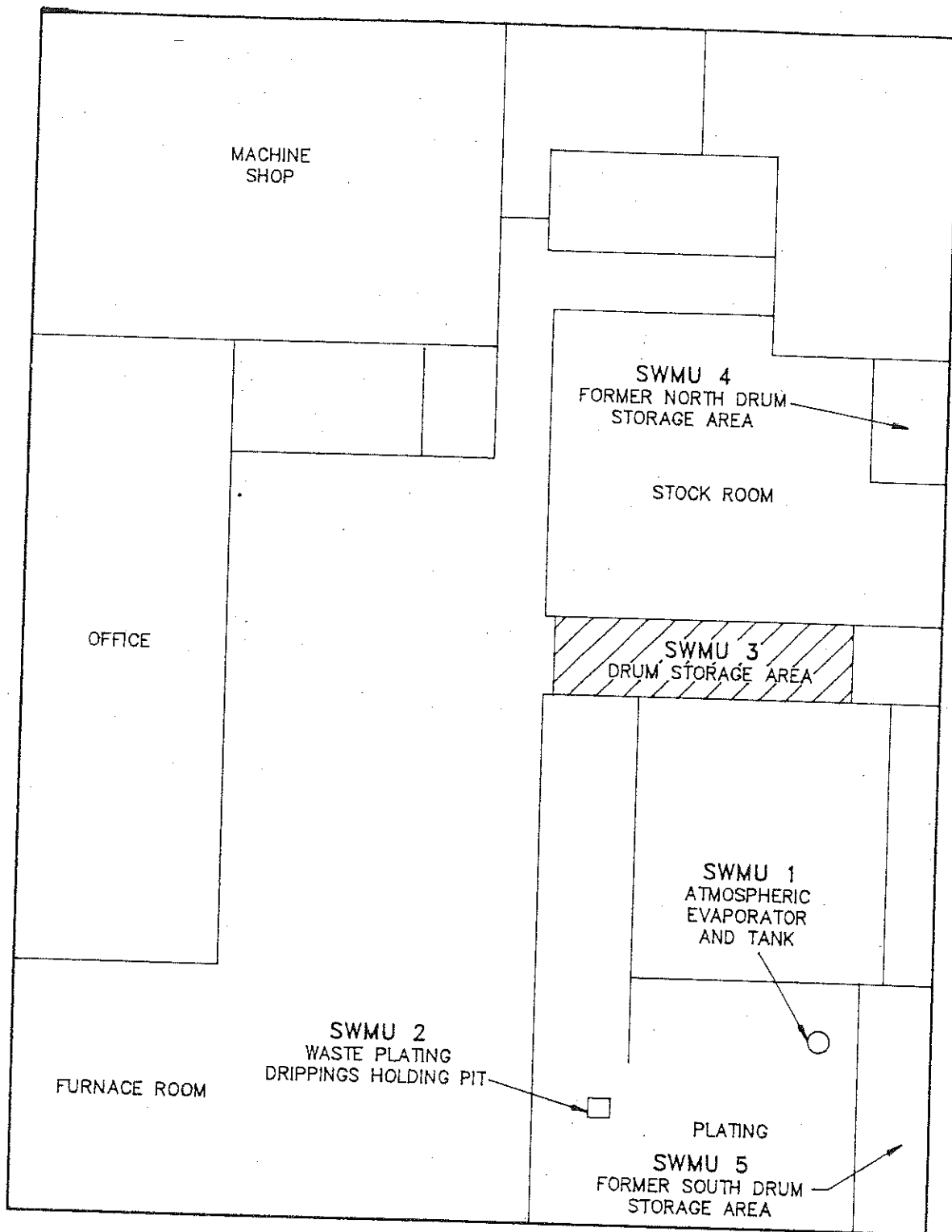
Spent nitric acid (D002 and D006) (about 510 gallons per year), generated by the electroplating operation, is stored and accumulated in drums at the DSA (SWMU 3), and is transported off site by Van Waters and Rogers, Inc., of Chicago, Illinois, for neutralization and chemical treatment at Laidlaw Environmental Services, Inc., of Hilliard, Ohio (Elecpac, 1991 or 1992). Prior to 1988, spent nitric acid (about 775 gallons per year) was stored and accumulated in drums at the Former South DSA (SWMU 5), and was transported off site by Aqua Tech, Inc., of

TABLE 1
SOLID WASTE MANAGEMENT UNITS

| <u>SWMU Number</u> | <u>SWMU Name</u> | <u>RCRA Hazardous Waste Management Unit^a</u> | <u>Status</u> |
|------------------------|--|---|---|
| 1 | Atmospheric Evaporator and Tank | Yes | Active; hazardous waste treatment |
| 2 | Waste Plating Drippings Holding Pit | No | Active; nonhazardous waste storage |
| 3 | DSA | Yes | Active; RCRA-clean closed in 1985; currently used for less than 90-day storage of hazardous and nonhazardous wastes |
| 4 | Former North DSA | Yes | Inactive; underwent IEPA approved RCRA-clean closure in 1985 |
| 5 | Former South DSA | Yes | Inactive; underwent IEPA approved RCRA-clean closure in 1985 |

Note:

^a A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.



10' 0 10' 20'
SCALE: 1" = 20'

ELECPAC DIVISION OF WILBRECHT
ELECTRONICS, INC.
CARY, ILLINOIS

FIGURE 2
FACILITY LAYOUT

PRC ENVIRONMENTAL MANAGEMENT, INC.

ELECPAC.DWG - 01/15/93 - CTR - 000-00508716J

SOURCE: MODIFIED FROM ELECPAC, 1990

TABLE 2
SOLID WASTES

| <u>Waste/EPA Waste Code^a</u> | <u>Source</u> | <u>Solid Waste Management Unit</u> |
|--|---------------------------------|------------------------------------|
| Spent EN™ strip solution/F006 | Electroplating | SWMU 1 or 3 |
| Spent copper strip solution/F006 | Electroplating | SWMU 1 or 3 |
| Spent nickel strip solution/F006 | Electroplating | SWMU 1 or 3 |
| Spent nitric acid/D002 and D006 | Electroplating | SWMU 3; formerly 5 |
| Spent potassium permanganate solution/D002 | Electroplating | SWMU 3; formerly 4 |
| Spent petroleum naphtha/D001 | Parts cleaning | SWMU 3; formerly 5 |
| Spent methanol/F003 | Parts cleaning | SWMU 3; formerly 5 |
| Spent methyl ethyl ketone/F003 | Parts cleaning | SWMU 3; formerly 5 |
| Spent 1,1,1-trichloroethane/F001 | Parts degreasing | SWMU 3; formerly 5 |
| Spent plating bath drippings/F006 or NA | Electroplating | SWMU 2 and 3 |
| Spent lapping oil and solvents/NA | Machine lubrication and cleanup | SWMU 3 |
| Spent wash light oils/NA | Machine lubrication | SWMU 3 |
| Scrap metal/NA | Machining | SWMU 3 |
| Spent perchloroethylene/F001 | Parts cleaning and degreasing | Formerly SWMUs 3 or 5 |
| Spent cyanide plating solution/D002 and D007 | Electroplating | Formerly SWMUs 3 or 4 |
| Spent chromic acid/ D002 and D007 | Electroplating | Formerly SWMUs 3 or 4 |
| Spent electroless nickel solution/NA | Electroplating | Formerly SWMUs 3 or 4 |
| Spent nickel sulfamate solution/NA | Electroplating | Formerly SWMUs 3 or 4 |

Notes:

^a Not applicable (NA) designates nonhazardous waste.

Port Washington, Wisconsin, for neutralization and chemical treatment at Michigan Disposal, Inc., of Belleville, Michigan; Nelson Industrial Services, Inc., of Detroit Michigan; or Chem-Met Services, Inc. of Wyandotte, Michigan (Elecpac, 1987).

Spent potassium permanganate solution (D002) (about 260 gallons per year), generated by the electroplating operation, is stored and accumulated in drums at the DSA (SWMU 3), and is transported off site by Van Waters and Rogers, Inc. of Chicago, Illinois, for neutralization and chemical treatment at Laidlaw Environmental Services, Inc., of Hilliard, Ohio (Elecpac, 1991 or 1992). Prior to 1988, spent potassium permanganate solution (about 160 gallons per year) was stored and accumulated in drums at the Former North DSA (SWMU 4), and was transported off site by Aqua Tech, Inc., of Port Washington, Wisconsin, or St. Joseph's Motor Lines, Inc. of Atlanta, Georgia, for neutralization and chemical treatment at Groce Labs, Inc., of Greens, South Carolina (Elecpac, 1987).

Spent petroleum naphtha (D001) (about 584 gallons per year), generated by parts cleaning, is stored and accumulated in drums at the DSA (SWMU 3), and is transported off site by Ozinga Transportation Systems of Alsip, Illinois, for recycling at Clayton Chemical Company of Sauget, Illinois (Elecpac, 1991 and 1992). Prior to 1988, spent petroleum naphtha (about 300 gallons per year) was stored and accumulated in drums at the Former South DSA (SWMU 5), and was transported off site by Safety-Kleen Corporation of Elgin, Illinois, for recycling at its Dolton, Illinois facility (Elecpac, 1987).

Spent methanol (F003) (about 220 gallons per year), generated by parts cleaning, is stored and accumulated in drums at the DSA (SWMU 3), and is transported off site by Ozinga Transportation Systems of Alsip, Illinois or Solvent Systems International of Hampshire, Illinois, for recycling or fuel blending at either Clayton Chemical Company of Sauget, Illinois or to Petrochem Processing, Inc. of Detroit, Michigan (Elecpac, 1991 and 1992). Prior to 1988, spent methanol (quantity unknown) was stored and accumulated in drums at the Former South DSA (SWMU 5), and was transported off site by Safety-Kleen Corporation of Elgin, Illinois, for recycling or fuel blending at its Dolton, Illinois facility (Elecpac, 1987).

Spent methyl ethyl ketone (F003) (about 55 gallons per year), generated by parts cleaning, is stored and accumulated in drums at the DSA (SWMU 3), and is transported off site by Ozinga Transportation Systems, of Alsip, Illinois, for recycling or fuel blending at Clayton Chemical Company of Sauget, Illinois (Elecpac, 1991 and 1992). Prior to 1988, spent methyl ethyl ketone (about 55 gallons per year) was stored and accumulated in drums at the Former South DSA (SWMU 5), and was transported off site by Aqua Tech, Inc., of Port Washington, Wisconsin, for

recycling or fuel blending at Frontier Chemical Company of Niagara Falls, New York (Elecpac, 1987).

Spent 1,1,1-trichloroethane (F001) (about 150 gallons per year), generated by parts degreasing, is stored and accumulated in drums at the DSA (SWMU 3), and is transported off site by Ozinga Transportation Systems of Hampshire, Illinois, for recycling at Clayton Chemical Company of Sauget, Illinois (Elecpac, 1991 and 1992). Prior to 1988, spent 1,1,1-trichloroethane (about 60 gallons per year) was generated from the parts cleaning operations. This waste was stored and accumulated in drums at the Former South DSA (SWMU 5), and was transported off site by Safety-Kleen Corporation of Elgin, Illinois, for recycling or disposal at its Dolton, Illinois facility (Elecpac, 1987).

Nonhazardous or hazardous (F006) spent plating bath drippings (quantity unknown), generated by the electroplating operation, is collected daily in the Waste Plating Drippings Holding Pit (SWMU 2), and tested by the facility prior to discharge to the Village of Cary's Wastewater Treatment Plant as a nonhazardous waste. If the spent plating bath drippings cannot be discharged to the Village of Cary's sewerage system, the facility pumps the spent plating bath drippings into drums and declares the waste RCRA-hazardous. The spent plating bath drippings (F006) are stored and accumulated in the DSA (SWMU 3) and are transported off site by Solvent Systems International, Inc., of Hampshire, Illinois, for recycling at CP Inorganics, Inc., of Joliet, Illinois (Elecpac, 1992b).

Nonhazardous spent lapping oil and paraffinic-based solvents and nonhazardous spent wash light oils (about 1320 to 1760 per year), generated by machine lubrication and cleanup, are stored and accumulated in drums at the DSA (SWMU 3). This waste is transported off site by Indiana Environmental Transportation Company of East Chicago, Indiana, Solvent Systems International, Inc., of Hampshire, Illinois; Solar Environmental, Inc., of Gary Indiana; or Nortro, Inc. of Detroit, Michigan. The transporters ship the spent lapping oil and paraffinic-based solvent for fuel blending or recycling at Pollution Control Industries of Indiana (PCII) of East Chicago, Indiana; Solar Environmental, Inc. of Gary Indiana; or Petro Chem Processing, Inc., of Detroit, Michigan (Elecpac, 1991 and 1992).

Nonhazardous scrap metal (24-55 gallon drums per year), generated by the machining operation, is stored and accumulated in drums at the DSA (SWMU 3), and is transported off site by Elgin Salvage, Inc. for recycling at their Elgin, Illinois facility.

From 1981 through 1987, spent perchloroethylene (F001) (quantity unknown) generated from parts cleaning and degreasing, was stored and accumulated in drums at the Former South

DSA (SWMU 5) or the DSA (SWMU 3). The off-site transporter and the treatment, storage, or disposal facility used by Elecpac are unknown (Elecpac, 1987).

From 1981 through 1990, spent cyanide plating solution (D002 and F007) (about 110 gallons in 1985) was generated by the electroplating operations, was stored and accumulated in drums at the Former North DSA (SWMU 4) or the DSA (SWMU 3), and was transported off site by Alliance Transportation, Inc., of Madison, Wisconsin; Aqua Tech, Inc., of Port Washington, Wisconsin; PCII of East Chicago, Indiana; or St. Joseph's Motor Lines, Inc. of Atlanta, Georgia, for cyanide destruction and chemical treatment at Chem-Met Services, Inc. of Wyandotte, Michigan; Cyano Kem, Inc. of Detroit, Michigan; or American Chemical Refining Company, of Villa Park, Illinois (Elecpac 1985, 1987, and 1991).

From 1981 through 1985, spent chromic acid (D002 and D007) (quantity unknown) generated by the electroplating operation, was stored and accumulated in drums at the Former South DSA (SWMU 5) or the DSA (SWMU 3). This waste was transported off site by either Alliance Transportation of Madison, Wisconsin or Aqua-Tech, Inc., of Port Washington, Wisconsin, for neutralization and chemical treatment at Cyano Kem, Inc., of Detroit, Michigan (Elecpac, 1985).

From 1981 through 1990, nonhazardous spent electroless nickel solution (quantity unknown), and nonhazardous spent nickel sulfamate solution (quantity unknown), were stored and accumulated in drums at the Former North DSA (SWMU 4) or the DSA (SWMU 3). These wastes were transported off site by Alliance Transportation, Inc., of Madison, Wisconsin; Aqua Tech, Inc., of Port Washington, Wisconsin; PCII of East Chicago, Indiana; or St. Joseph's Motor Lines, Inc. of Atlanta, Georgia, for chemical treatment at Chem-Met Services, Inc. of Wyandotte, Michigan; Cyano Kem, Inc. of Detroit, Michigan; or American Chemical Refining Company, of Villa Park, Illinois (Elecpac 1985, 1987, and 1991).

2.4 HISTORY OF DOCUMENTED RELEASES

The facility has no history of documented releases to ground water, surface water, air, or on-site soils.

2.5 REGULATORY HISTORY

On August 5, 1980, Elecpac submitted a Notification of Hazardous Waste Activity form to EPA for its facility located at 15 West Main Street in Cary, Illinois (Elecpac, 1980). The facility

was listed as a large-quantity generator handling the following EPA hazardous waste codes: F001, F005 through F009, F015, P074, P098, P106, U154, and U210.

In 1981, the facility moved from 15 West Main Street to its present location. Elecpac never submitted a new Notification of Hazardous Waste Activity form as required by EPA. Since 1980, Elecpac has used the same generator identification number, even though the operation at 15 West Main Street was discontinued.

On June 20, 1984, the IEPA inspected Elecpac based on an anonymous complaint claiming the facility was storing hazardous wastes for more than 90 days. IEPA's inspection revealed that Elecpac was storing hazardous waste for more than 90 days at SWMUs 3 through 5 and there were other RCRA violations (IEPA, 1984a).

On July 19, 1984, IEPA issued a notice of noncompliance letter to Elecpac for the following violations: (1) failure to file a RCRA Part A Permit Application for storage of hazardous waste over 90 days; (2) having no waste analysis plan on file at IEPA; (3) having no documented inspection program, personnel training program, contingency plan, closure plan, and financial assurance for closure costs; and (4) failing to retain hazardous waste manifests for 3 years (IEPA, 1984a).

IEPA's July 19, 1984 noncompliance letter required Elecpac to submit a RCRA Part A Permit Application to EPA and required the facility to start RCRA closure proceedings for SWMUs 3 through 5 (IEPA, 1984a and 1984b).

Elecpac submitted the RCRA Part A Permit Application, which was received by IEPA on November 7, 1984 and by EPA on February 25, 1985 (Elecpac, 1984 and 1985). The process code and capacity listed for SWMUs 3 through 5 was storage (S01) only for 2,200 gallons. The EPA hazardous waste codes listed on the RCRA Part A Permit Application were D001, D002, D007, F001, F002, and F004. The facility has not submitted any modifications to the RCRA Part A Permit.

On November 1, 1984, the facility's consultant, Scientific Control Laboratories, Inc. (SCL), submitted Elecpac's RCRA closure plans to EPA for SWMUs 3 through 5. The plans were approved by IEPA on February 4, 1985 (IEPA, 1985a). On May 10, 1985, SCL submitted a RCRA-closure certification (SCL, 1985).

On June 7, 1985, IEPA completed a RCRA-closure inspection to determine the facility's compliance with IEPA's clean closure requirements. On August 15, 1985, IEPA approved the

RCRA-clean closure of the facility (IEPA, 1985b). Elecpac is a large-quantity generator and treatment facility which stores hazardous wastes for less than 90-days.

On April 3, 1986, IEPA sent Elecpac a compliance inquiry letter requesting the facility submit the 1985 Annual Hazardous Waste Treatment Report to IEPA within 15 days (IEPA, 1986). Facility, IEPA, or EPA files do not indicate whether or not Elecpac responded to this compliance inquiry letter.

The facility has no National Pollutant Discharge Elimination system permit or underground storage tanks. On March 19, 1990, Elecpac was issued an air operating permit No. 880100353, permitting the use of vapor degreasers, electroplating, and the atmospheric evaporator (IEPA, 1990).

On May 2, 1988, the facility was issued a Permit No. 1988-EE-0512 to construct, own, and operate a pretreatment system for metal finishing rinsewaters, which are discharged to the Village of Cary, wastewater treatment plant. All pretreated rinsewaters that exceed the electroplating and metal finishing pretreatment categorical standards are pumped into drums, declared a hazardous waste, and stored in the DSA (SWMU 3) (IEPA, 1988).

2.6 ENVIRONMENTAL SETTING

This section describes the climate; flood plain and surface water; geology and soils; and ground water in the vicinity of the facility.

2.6.1 Climate

The climate in McHenry County is continental. The average daily temperature is 48.6 degrees Fahrenheit (°F). The highest average daily temperature is 86.3 °F in July (DOC, 1974).

The total annual precipitation for the county is 35.62 inches (DOC, 1974). The mean annual lake evaporation for the area is about 30 inches (DOC, 1968). The 1-year, 24-hour maximum rainfall is about 2.5 inches (DOC, 1963).

The prevailing wind is from the west-northwest. Average wind speed is highest in April at 11.7 miles per hour (DOC, 1974).

2.6.2 Flood Plain and Surface Water

Elecpac is not located within a flood plain (FEMA, 1983). The nearest surface water body is a Village of Cary pond in Jaycee Park, about 0.2 mile northeast of the facility and is used for recreational purposes. Other surface water bodies include Lake Killarney, which is about 1.3 miles north; Cary Creek, which is about 1.4 miles southeast; and the Fox River, which is about 1.7 miles south. Surface water runoff from the Elecpac facility drains into a storm sewer system, which flows west to a storm sewer retention pond located at the west end of Industrial Drive. Storm sewer water in the retention pond evaporates and is not discharged to any other surface water or sewer system.

2.6.3 Geology and Soils

The facility is underlain by soils of both the Volinia Silt Loam to Loam and Warsaw-Lorenzo Complex series. The Volinia Silt Loam series is a dark soil with the top 8 to 12 inches consisting of black friable loam, underlain by a very dark brown friable loam to dark brown clay loam subsoil extending between 12 to 83 inches below ground surface (bgs). The lowest portion of the subsoil is a dark brown, friable sandy loam (USDA, 1965). The Warsaw-Lorenzo Complex series is an intermingled soil complex, where separation of the Warsaw and Lorenzo series was impractical. The top 8 to 29 inches consist of a very dark brown to very dark grayish brown friable heavy loam, or firm silty or sandy clay loam, extending to 29 inches bgs (USDA, 1965).

Although facility-specific information is not available, geological bedrock units and well logs in the general vicinity of the facility are known. Bedrock occurs immediately below glacial deposits and clay till (sand and gravel aquifer), at 150 to 200 feet bgs. The bedrock is a Silurian-age dolomite of the Niagara and Alexandrian series (ISGS, 1959; 1966; and 1971; Village of Cary, 1993). The Niagara and Alexandrian Dolomite is up to 100 feet thick in this area and is the most widely used source of good quality ground water (ISGS, 1959; 1966; and 1971).

Ordovician-age formations underlie the Niagara and Alexandrian Dolomite. The uppermost formation, the Maquoketa Shale, is a confining shale up to 100-feet thick. This unit is underlain by the Galena and Platteville Dolomites, which are 230 to 450 feet thick. Underlying this formation is the Glenwood-St. Peter Formation, a sandstone with minor dolomite and shale. This 100- to 280-foot thick formation is the most widely used unit of the sandstone aquifer.

Although not widely used, the 295- to 355-foot thick Prairie du Chien Formation, a dolomite underlying the Glenwood-St. Peter Formation, is used in combination with the

sandstone and dolomite aquifers. Three Cambrian Sandstone formations are below the Prairie du Chien Formation and include the 1685- to 2675-foot thick Ironton-Galesville, Eau Claire and Mt. Simon Formations. These Cambrian Sandstone formations are underlain by Precambrian-age crystalline rock, such as granite (ISGS, 1959; 1966; 1971; and Village of Cary, 1993).

2.6.4 Ground Water

The primary aquifers beneath the facility are the 150- to 200-foot thick sand and gravel aquifer, the 100-foot thick Niagara and Alexandrian Dolomite aquifer, the 100- to 280-foot thick Glenwood St. Peter Sandstone aquifer, and the 1685- to 2675-foot thick Ironton-Galesville, Eau Claire, and Mt. Simon Sandstone aquifer (ISWS, 1976; and Village of Cary, 1993).

Drinking water wells in the sand and gravel aquifer produce 10 to 500 gallons per minute (gpm). Ground water moves through cracks, crevices, and fractures to the Niagara and Alexandrian Dolomite aquifer, which is hydrologically interconnected with the sand and gravel aquifer. Well water yields up to 400 gpm have been reported. Both sandstone aquifer wells have water yields up to 700 gpm. Ground water generally flows west to east except for local cones of depression where municipalities use ground water.

Well water logs within 0.5 mile of the facility show a static water level from 35- to 135-feet bgs (ISGS, 1959; 1966; ISWS, 1976; Village of Cary, 1993). Data for hydraulic conductivity and potentiometric surface are unknown.

2.7 RECEPTORS

The facility occupies 0.2 acre in a mixed-use area in Cary, Illinois. Cary has a population of about 10,000 (Rand McNally, 1992).

The facility is bordered on the north-northeast by Sea Quest Pumps, Inc., a plastic valve and fittings manufacturer; on the west by three machine shops: General Assembly and Manufacturing Corporation, D.C. Engineering and Manufacturing Company, and IL Blower, Inc.; on the south by GLS Plastics, a plastic parts manufacturer; and on the east by an office/warehouse complex. The nearest school, Briargate Grade School, is about 0.7 mile east of the facility.

The nearest surface water body, a Village of Cary pond in Jaycee Park, is about 0.2 mile northeast of the facility and is used for recreational purposes. Other surface water bodies near the facility include Lake Killarney, located about 1.3 miles north; Cary Creek, which is about 1.4

miles southeast; and the Fox River, located about 1.7 miles south. All surface water drainage flows into a storm water retention pond, which is situated off-site at the west end of Industrial Drive.

Ground water is used as drinking water, industrial, and municipal water supply. The nearest ground-water well is located about 0.5 mile south to southwest of the facility and is upgradient. The nearest downgradient water well is about 1 mile east to southeast. Both upgradient and downgradient locations are municipal wells owned by the Village of Cary. The nearest residence is about 0.1 mile south of the facility.

Sensitive environments are not located on site. The nearest sensitive environment, a wetland, is about 0.2 mile northeast (NWI, 1980).

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the five SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and PRC's observations. Figure 2 shows the SWMU locations.

SWMU 1

Atmospheric Evaporator and Tank

Unit Description:

The unit is aboveground and indoors, covering an area of about 4 by 6 feet. The unit consists of a 80-gallon steel evaporator tank, heater, and atmospheric vent. The unit is used to evaporate and concentrate spent EN™, copper, and nickel strip solutions by removing water. SWMU 1 is a RCRA-regulated treatment unit and the facility has not applied for a permit for this unit. The unit was not identified on the facility's RCRA Part A Permit Application.

Date of Startup:

This unit began operation in about 1981.

Date of Closure:

This unit is active.

Wastes Managed:

This unit manages spent EN™ strip solution (F006), spent copper strip solution (F006), and spent nickel strip solution (F006).

Release Controls:

Release controls include an epoxy-sealed concrete floor and a plating drippings holding pit and a secondary containment overflow pit attached.

**History of
Documented Releases:**

No releases from this unit have been documented.

Observations:

During the VSI, the unit was evaporating water from a nickel strip solution. No cracks in the concrete or stains were observed. PRC noted no evidence of release (see Photograph No. 1).

SWMU 2**Waste Plating Drippings Holding Pit****Unit Description:**

The unit is belowground and indoors. The unit covers an area of about 3 by 4 feet and can hold up to 150 gallons of plating bath drippings. The unit is rectangular and consists of a rubber membrane and fiberglass liner built into epoxy-sealed concrete. Plating bath drippings are collected from this unit daily and are analyzed for electroplating pretreatment categorical standards. The waste is then either discharged to the Village of Cary wastewater treatment plant or pumped into drums, declared a hazardous waste and stored in the DSA (SWMU 3).

Date of Startup:

This unit began operation in about 1981.

Date of Closure:

This unit is active.

Wastes Managed:

This unit manages nonhazardous or hazardous (F006) spent plating bath drippings.

Release Controls:

Release controls include an epoxy-sealed concrete floor and sides, and a secondary containment overflow pit attached.

**History of
Documented Release:**

No releases from this unit have been documented.

Observations:

During the VSI, plating bath drippings were observed in the unit. No stains or cracks were observed. PRC noted no evidence of release (see Photograph No. 2).

SWMU 3**DSA****Unit Description:**

The unit is aboveground and indoors, covering an area of about 10 by 37 feet. The unit consists of an epoxy-sealed concrete floor with no other spill controls present.

Date of Startup:

This unit began operation in about 1981.

Date of Closure: This unit is active for less than 90-day storage of hazardous waste and storage of nonhazardous waste. The unit was certified RCRA-clean closed by the facility, and the certification was approved by IEPA on August 15, 1985.

Wastes Managed: This unit manages spent ENTM strip solution (F006); spent copper strip solution (F006); spent nickel strip solution (F006); spent nitric acid (D002 and D006); spent potassium permanganate solution (D002); spent petroleum naphtha (D001); spent methanol (F003); spent methyl ethyl ketone (F003); spent 1,1,1-trichloroethane (F001); nonhazardous or hazardous (F006) spent plating bath drippings; nonhazardous spent lapping oil and paraffinic-based solvents; nonhazardous spent wash light oils; and nonhazardous scrap metal. In the past, the facility managed spent perchloroethylene (F001), spent cyanide plating solution (D002 and F007); spent chromic acid (D002 and D007); nonhazardous spent electroless nickel solution; and nonhazardous spent nickel sulfamate solution.

Release Controls: The only release control is an epoxy-sealed concrete floor.

History of Documented Release: No releases from this unit have been documented.

Observations: During the VSI, the unit contained 55-gallon drums of waste, including two drums of waste potassium permanganate, two drums of spent nitric acid, four drums of spent copper strip solution, one drum of spent methyl ethyl ketone, six drums of spent lapping oil and paraffinic-based solvent, and four drums of scrap steel. PRC observed cracks in the concrete floor; however, no stains were observed. PRC noted no evidence of release (see Photographs No. 3 and 4).

SWMU 4 **Former North DSA**

Unit Description: The unit is aboveground and indoors, covering an area of about 11 by 18 feet. The unit is enclosed on three sides by concrete

masonry walls, and has an epoxy-sealed concrete floor that is sunk about 8 inches.

Date of Startup: The unit began operation in about 1981.

Date of Closure: The unit has been inactive since 1985. The unit was certified RCRA-clean closed by the facility, and the certification was approved by IEPA on August 15, 1985.

Wastes Managed: The unit managed spent potassium permanganate solution (D002); spent cyanide plating solution (D002 and F007); nonhazardous spent electroless nickel solution; and nonhazardous spent nickel sulfamate solution.

Release Controls: Release controls include a bermed, epoxy-sealed concrete floor, concrete masonry walls, and a ventilation system.

History of Documented Release: No releases from this unit have been documented.

Observations: During the VSI, PRC observed that the unit contained virgin raw materials used in production. No waste was stored in the unit. No floor drains or stains were present. PRC noted no evidence of release (see Photograph No. 5).

SWMU 5 Former South DSA

Unit Description: The unit is aboveground and indoors, covering an area of about 11 by 33 feet. The unit is enclosed on three sides by concrete masonry walls, and has an epoxy-sealed concrete floor that is sunk about 8 inches.

Date of Startup: This unit began operation in about 1981.

Date of Closure: This unit has been inactive since 1985. The unit was certified RCRA-clean closed by the facility, and the certification was approved by IEPA on August 15, 1985.

Wastes Managed: This unit managed spent nitric acid (D002 and D006); spent petroleum naphtha (D001); spent methanol (F003); spent methyl ethyl ketone (F003); spent 1,1,1-trichloroethane (F001); spent perchloroethylene (F001); and spent chromic acid (D002 and D007).

Release Controls: Release controls include a bermed, epoxy-sealed concrete floor, concrete masonry walls, and a ventilation system.

History of Documented Release: No releases from this unit have been documented.

Observations: During the VSI, PRC observed that the unit contained virgin raw materials used in production. No wastes were stored in the unit. PRC noted that there was a black stain on the concrete floor (see Photograph No. 6).

4.0 AREAS OF CONCERN

PRC identified no AOCs during the PA/VSI.

RELEASED
DATE 7/18/82
RIN #
INITIALS CTV

ENFORCEMENT
CONFIDENTIAL

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified five SWMUs and no AOCs at the Elecpac facility. Background information on the facility's location; operations; waste generating processes and waste management practices; history of documented releases; regulatory history; environmental setting; and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. Following are PRC's conclusions and recommendations for each SWMU. Table 3, located at the end of this section, summarizes the SWMUs at the facility and the recommended further actions.

SWMU 1 Atmospheric Evaporator and Tank

Conclusions: The Atmospheric Evaporator and Tank is used to evaporate and concentrate spent EN™, copper and nickel strip solutions. SWMU 1 is a RCRA treatment unit and the facility does not have a permit to operate the unit. The unit was not identified on the facility's Part A Permit Application. The unit has a low potential for release to ground water, surface water, air, and on-site soils because the unit is indoors, has an epoxy-sealed concrete floor, and has a plating drippings holding pit and a secondary containment attached.

Recommendations: PRC recommends no further action for this SWMU at this time.

SWMU 2 Waste Plating Drippings Holding Pit

Conclusions: The Waste Plating Drippings Holding Pit is used to collect plating bath drippings. The unit has a low potential for release to ground water, surface water, air, and on-site soils because the unit is indoors, has a rubber membrane and fiberglass liner built into the epoxy-sealed concrete, and has a secondary containment pit attached.

Recommendations: PRC recommends no further action for this SWMU at this time.

SWMU 3 DSA

Conclusions: The DSA is used to store hazardous and nonhazardous wastes. The unit has a low potential for release to ground water, surface water, air, and on-

site soils because the unit is indoors and has an epoxy-sealed concrete floor. The unit does have cracks in the concrete floor and there is no containment berm surrounding the unit.

Recommendations: PRC recommends that the facility seal the cracks in the concrete floor and construct a berm around this unit to contain all stored wastes.

SWMU 4 Former North DSA

Conclusions: The Former North DSA was used to store hazardous and nonhazardous wastes. The unit has a low potential for release to ground water, surface water, air, and on-site soils because the unit is indoors, has an epoxy-sealed bermed concrete floor, and concrete masonry walls, is inactive, and was certified RCRA-clean closed by IEPA on August 15, 1985.

Recommendations: PRC recommends no further action for this SWMU at this time.

SWMU 5 Former South DSA

Conclusions: The Former South DSA was used to store hazardous and nonhazardous wastes. The unit has a low potential for release to ground water, surface water, air, and on-site soils because the unit is indoors, has an epoxy-sealed, bermed concrete floor and concrete masonry walls, is inactive, and was certified RCRA-clean closed by IEPA on August 15, 1985.

Recommendations: PRC recommends no further action for this SWMU at this time.

RELEASED
DATE 7/1/85
RIN #
INITIALS AV

RELEASED
DATE 7/18/80
RIN # 001
INITIALS WTV

ENFORCEMENT
CONFIDENTIAL

TABLE 3
SWMU SUMMARY

| <u>SWMU</u> | <u>Dates of Operation</u> | <u>Evidence of Release</u> | <u>Recommended Further Action</u> |
|--|---------------------------|----------------------------|---|
| 1. Atmospheric Evaporator and Tank | About 1981 to present | None | No further action |
| 2. Waste Plating Drippings Holding Pit | About 1981 to present | None | No further action |
| 3. DSA | About 1981 to present | None | Seal the cracks that exist in the concrete floor and construct a berm around the unit |
| 4. Former North DSA | About 1981 to 1985 | None | No further action |
| 5. Former South DSA | About 1981 to 1985 | None | No further action |

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ATTACHMENT A
EPA PRELIMINARY ASSESSMENT FORM 2070-12



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE
IL

02 SITE NUMBER
ILD 049 010 564

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)

Elecpac Division of Wilbrecht Electronics, Inc. (Elecpac)

02 STREET, ROUTE NO. OR SPECIFIC LOCATION IDENTIFIER

740 Industrial Drive, Suite D

03 CITY

Cary

04 STATE

IL

05 ZIP CODE

60013

06 COUNTY

McHenry

07 COUNTY

CODE

111

08 CONG

DIST

16

09 COORDINATES: LATITUDE

42°12'51" N

LONGITUDE

88°15'28" W

10 DIRECTIONS TO SITE (Starting from nearest public road)

Take Highway 14 (north or south) to Algonquin - Cary Road. Proceed 0.1 mile west to Industrial Drive. Turn right (northwest) on Industrial Drive to the facility.

III. RESPONSIBLE PARTIES

01 OWNER (if known)

Wilbrecht Electronics, Inc.

02 STREET (Business, mailing, residential)

240 E. Plato Blvd.

03 CITY

St. Paul

04 STATE

MN

05 ZIP CODE

55107

06 TELEPHONE NUMBER

(612) 222-2791

07 OPERATOR (if known and different from owner)

08 STREET (Business, mailing, residential)

09 CITY

10 STATE

11 ZIP CODE

12 TELEPHONE NUMBER

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE

☐ B. FEDERAL:

(Agency Name)

☐ C. STATE

☐ D. COUNTY

☐ E. MUNICIPAL

☐ F. OTHER

(Specify)

☐ G. UNKNOWN

14. OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☒ A. RCRA 3010 DATE RECEIVED: 08 / 05 / 80

MONTH DAY YEAR

☐ B. UNCONTROLLED WASTE SITE (RCRA 103 c) DATE RECEIVED:

1 / 1 / 1981

MONTH DAY YEAR

☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

BY (Check all that apply)

☒ YES

DATE 01/04/93

☐ A. EPA

☒ B. EPA CONTRACTOR

☐ C. STATE

☐ D. OTHER CONTRACTOR

☐ NO

☐ E. LOCAL HEALTH OFFICIAL

☐ F. OTHER:

(Specify)

CONTRACTOR NAME(S): PRC Environmental Management, Inc. (PRC)

02 SITE STATUS (Check one)

☒ A. ACTIVE

☐ B. INACTIVE

☐ C. UNKNOWN

03 YEARS OF OPERATION

1981 Present

BEGINNING YEAR ENDING YEAR

☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Spent EN™ strip solution (F006); spent copper and nickel strip solutions (F006); spent nitric acid (D002 and D006); spent potassium permanganate solution (D002); spent petroleum naphtha (D001); spent methanol (F003); spent methyl ethyl ketone (F003); spent 1,1,1-trichloroethane (F001); spent plating bath drippings (F006 or nonhazardous); spent lapping oil and solvents (nonhazardous); spent wash light oils (nonhazardous); and scrap metal (nonhazardous).

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Overall potential for release to environmental media is low. The greatest hazard to the environment is from the various spent plating solutions and spent solvents that are stored on site. If a fire were to occur, an air or on-site soil release of heavy metals and/or solvents could occur. The nearest residential population is about 0.1 mile south of the facility.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents.)

☐ A. HIGH

(Inspection required promptly)

☐ B. MEDIUM

(Inspection required)

☒ C. LOW

(Inspect on time-available basis)

☐ D. NONE

(No further action needed; complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT

Kevin Pierard

02 OF (Agency/Organization)

U.S. EPA

03 TELEPHONE NUMBER

(312) 886-4448

04 PERSON RESPONSIBLE FOR ASSESSMENT

Kurt Whitman

05 AGENCY

06 ORGANIZATION

PRC

07 TELEPHONE NUMBER

(414) 821-5894

08 DATE

01 / 29 / 93

MONTH DAY YEAR

ATTACHMENT B
VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

Elecpac Division of Wilbrecht Electronics, Inc.
740 Industrial Drive,
Cary, Illinois 60013

ILD 049 010 564

Date: January 4, 1993

Primary Facility Representative: Mike Wells, Vice President, Elecpac Division of Wilbrecht Electronics, Inc. (Elecpac)

Representative Telephone No.: (708) 639-2307

Additional Facility Representative: Jeff Latsch, Plating Production Manager, Elecpac

Inspection Team: Kurt Whitman, PRC Environmental Management, Inc. (PRC)
Keith Foszcz, PRC

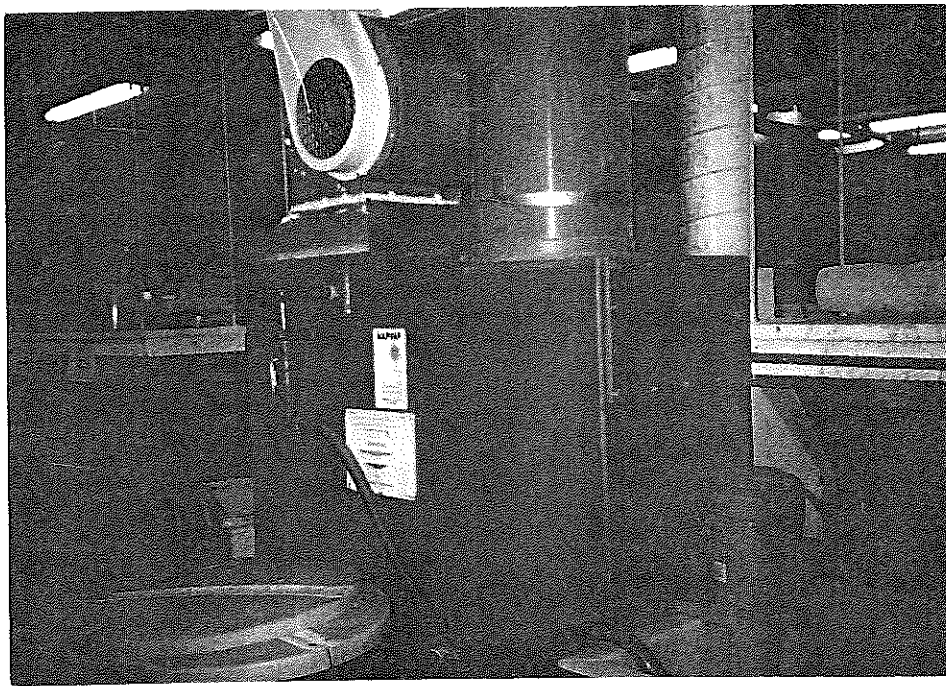
Photographer: Kurt Whitman, PRC

Weather Conditions: Calm, overcast, temperature about 45 °F

Summary of Activities: The visual site inspection (VSI) began at 8:30 a.m. with an introductory meeting. The inspection team explained the purpose of the VSI and the agenda for the visit. Facility representatives then discussed the facility's past and current operations, solid wastes generated, and release history. Facility representatives provided the inspection team with copies of requested documents.

The VSI tour began at 8:40 a.m. PRC began its inspection of the electroplating room and the Atmospheric Evaporator and Tank (SWMU 1). PRC inspected the Waste Plating Drippings Holding Tank (SWMU 2); the Former North Drum Storage Area (DSA) (SWMU 4); the Former South DSA (SWMU 5); and the DSA (SWMU 3).

The tour concluded at 10:17 a.m., after which the inspection team held an exit meeting with facility representatives. The VSI was completed and the inspection team left the facility at 10:22 a.m.



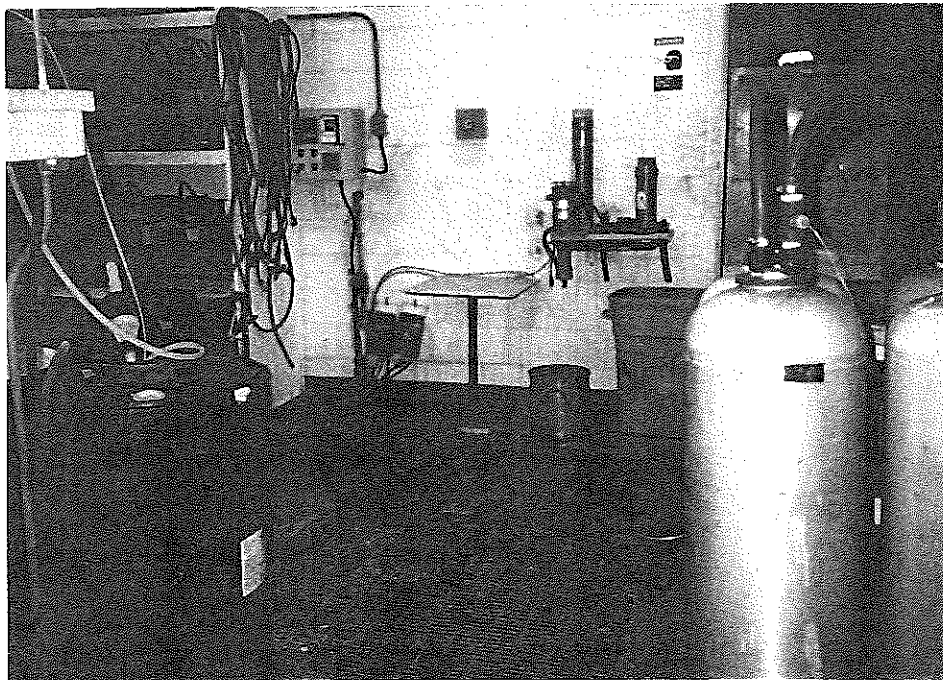
Photograph No. 1

Orientation: Southwest

Description: This is a photograph of the Atmospheric Evaporator and Tank.

Location: SWMU 1

Date: January 4, 1993



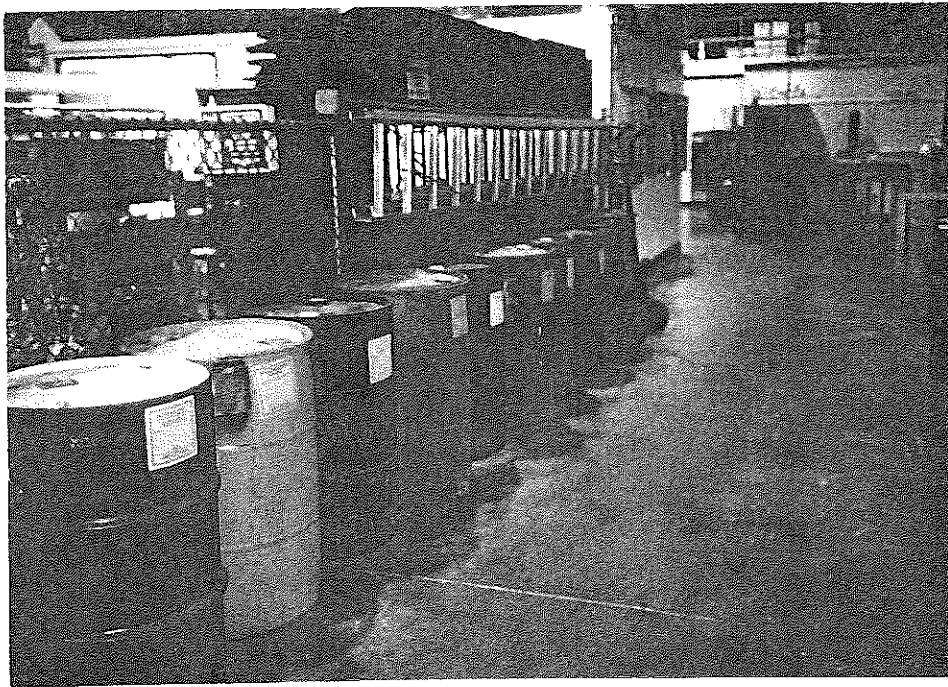
Photograph No. 2

Orientation: Southwest

Description: This is a photograph of the area where the Waste Plating Drippings Holding Pit is located.

Location: SWMU 2

Date: January 4, 1993



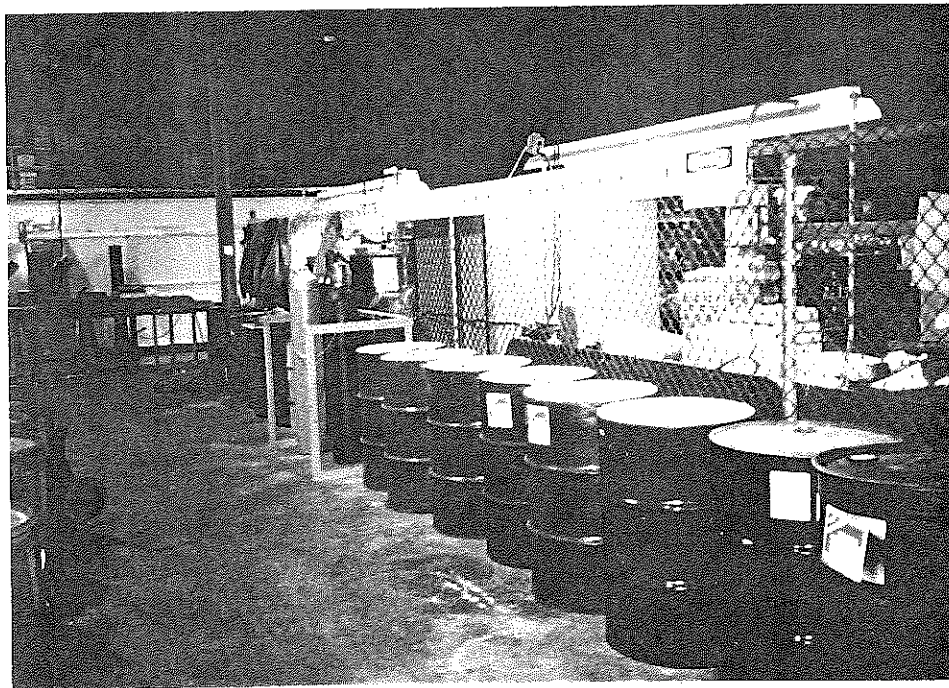
Photograph No. 3

Orientation: Southwest

Description: This is a photograph of the hazardous waste drums stored at the Drum Storage Area (DSA).

Location: SWMU 3

Date: January 4, 1993



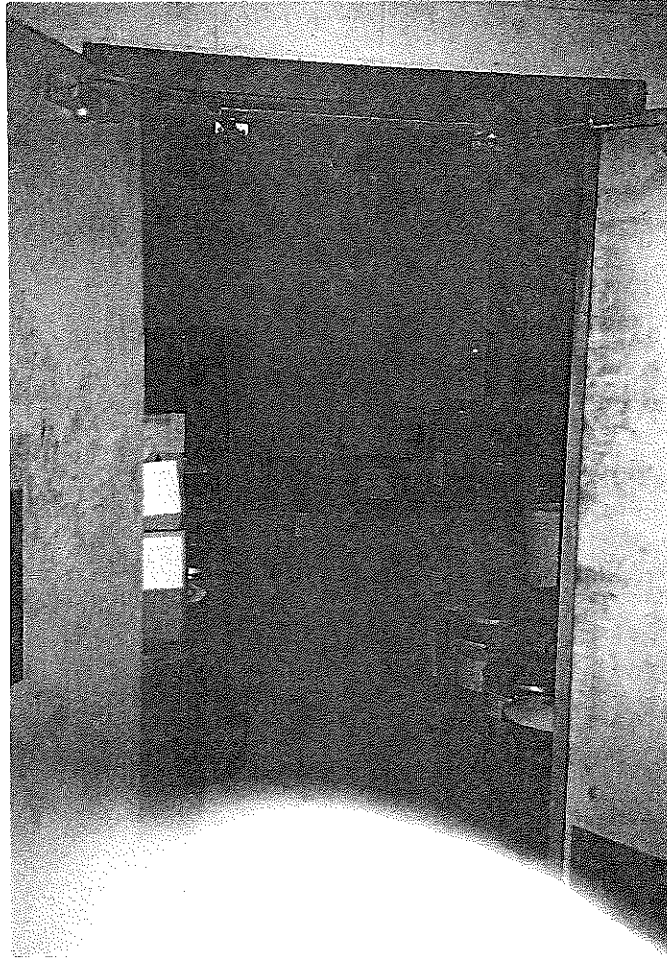
Photograph No. 4

Orientation: Northwest

Description: This is a photograph of the nonhazardous waste drums stored at the DSA.

Location: SWMU 3

Date: January 4, 1993



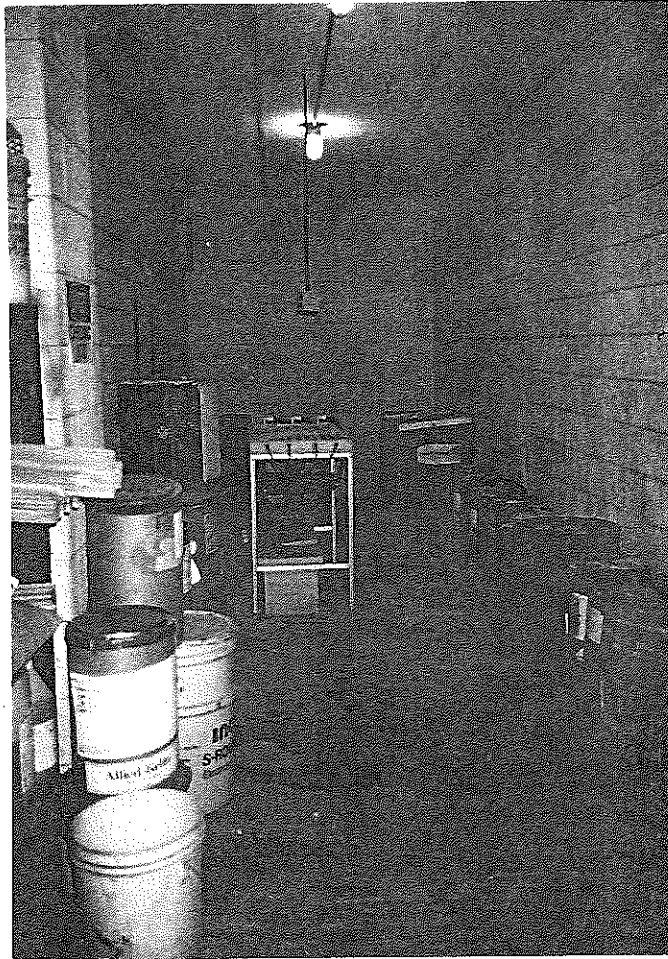
Photograph No. 5

Orientation: North-Northeast

Description: This is a photograph of the Former North DSA.

Location: SWMU 4

Date: January 4, 1993



Photograph No. 6

Orientation: South-Southeast

Description: This is a photograph of the Former South DSA.

Location: SWMU 5
Date: January 4, 1993

ATTACHMENT C
VISUAL SITE INSPECTION FIELD NOTES

| | | |
|------|--|---|
| 78 | Monday 1/4/93 | 79 |
| B:30 | Cory, Illinois Ekepac - Wilbrecht <u>Mike walls</u> Jeff Latsch | glas to metal sealing process |
| | PRC - Kurt Whisman Keith Forester | storage for drums of machine colants; oil in room of beer |
| 8:40 | Tour 55 employees 10-11 years here | tumbling to remove burrs |
| | Military aerospace ops - cleaning, boring, gas sealing, plating | buy most pins from other manufacturers, also glass |
| | scrap steel in 55-gallon drums | 3 furnaces for sealing; plating - selective plating of nickel, copper, tin, solder, pot |
| | pieces placed in carton holders for | Return from tour |
| | | 9:00 |
| | | 9:05 |
| | | explains operation plating - eliminates precision from |
| | | KJF |

| | | | | |
|----|----|---|--------|--------------------------------------|
| 78 | 80 | Monday 1/4/93 | 1/6/93 | B1 |
| | | had soldering. | | |
| | | Kurt wrote down solvents | | insert glass and pins then |
| | | can products used. | | plating furnace at 1800°F |
| | | acid based baths | | then plating last |
| | | waste gets drummed - | | PCI - organics |
| | | closed loop plating system | | 1/41 trichlor, methanol |
| | | dead dog rinsed - DI water | | MEK, nonhazard solvent |
| | | | | (Solvent ISO) |
| | | reduce volume w/ evaporator | | for cleaning |
| | | NI, Cu, wastes. | | ultrasonic cleaners - selective |
| | | 80 gallon (test evaporator) | | compounds, 1/41-trichlor. |
| | | reused till it gets ¹⁹⁷ contaminated | | |
| | | Fable → C.P.I. | | Started plating in 1981 |
| | | St. Charles, Batavia | | tin, copper, nickel |
| | | | | 87-88 started hard turning |
| | | | | and copper plating |
| | | No cyanide compounds used anymore | | |
| | | metal turning then | | just gold and copper cyanide |
| | | KPT | | stopped in 1985. |
| | | | | ZAT |

B:4

82

Monday 1/4/93

1/4/93

83

(1) vapor depresser - all
maintained by Fred

9:32 torn again

12-15,000 gallons per day
going to sewer
non-contact cooling water for 3
purifiers also goes to sewer,
monitored and pH control.
Carg comes in daily to
check monitors.

9:40 P1 Evaporator.

9:42 P2 Sump - treatment - floor
sealed, good condition,
receives floor drains only,
K97

concrete, rubber membrane,
several layers of fiberglass.
from pump, if necessary
pH control then discharged or
drummed if discrep.

P3 - drum storage area on
~~over~~ concrete, no stains
10 drums

2 perm-evaporate
2 N. tri / water
2 1/2 4 copper strip
1 Nickel strip
1 MEK

all poly drums, except MEK
metal drum

956 P4-6 drums of logging oil and
waste cleaner mix
K97

| | | | |
|-------|---|--------|--|
| 84 | Monday 1/4/93 | 1/4/93 | 85 |
| | Early Warehouse Storage | 10:07 | Return from town |
| | 14 9 empty nitrogen gas cylinders and 1 helium cylinder, contained in steel brackets and a chain. | | Scrap - Elgin Salvage, 8 drums every four months |
| 10:00 | P5 What 497 Alkaline room - drums inspected weekly, vented to outside continuously. 8 inch containment beam at door. | | Shipping oil mix. 6-8 drums for four months |
| 1001 | P6 Caustic room, 8 inch containment, stairs on floor | | Gordon Strong owner of building, Buddy Dodge, Chicago |
| | Scrap steel 5 drums, stainless, copper, steel | | Neighbors GLS Plastics - South Sequest Pump North valve and fittings, plastic |
| | | | Started in this building in 1977 |

86

Monday 1/4/93

79-80, same time it was
built.

10:22

finish meeting
leave ~~5:00 PM~~ pretty

West

Gen Ass & Mfg Corp

DC. Engr. & Maint.

IL Blower Inc.

K. T. Costum Creations

Stairs & Rails Unlimited

East

Office warehouse units

Residential

1/8 mile south

87

87

1/4/93

Park N.E. 1/4 mile

Jaycee Park

Lake \approx 5 acre

87

| | | | |
|---|-----------------------------|---|--|
| 1-4-93 | PA/15I # 000-005087 IL85 | 2 | metal pieces are placed |
| Arrive at Elapac (Wilbresh Electronics) | | | on carbon fixtures before |
| 08130 AM | Call Illinois. 740-244-1111 | | atmospheric furnace. (Glass |
| Dave, USEPA ID # I-D 049010564 | | | De mil smoking process) |
| Facility contact: Mike Wells | | | Mike Wells will give brief tour first before meeting |
| | Jeff Lortche | | OSWam Wawa into oil with Jeff Lortche. |
| Plc Personnel: Keith Forster & Kurt Whitman | | | Storage area, Machine |
| 0842 am Elapac leaves the | | | controls, cutting fluid or |
| under the old of the building. | | | Mobil, DFE oil |
| 250 employees | | | Products are pre-templed |
| Assigned military. Mike Wells new | | | wood, soap & soap to |
| is giving Keith Forster / Products important firm | | | debris products (Kochhausen) |
| Machining turning, cleaning, & | | | |
| being U.C.C). | | | Pins & glass products are |
| Stamper steel machining | | | produced from the inside |
| 1 Deviser in Machine Shop | | | Blue, green & brown common the |
| Stamper Solvent Systems Inc. takes | | | of the |
| away Scrap metal is stored | | | after metal is bleached. |
| 10 55 pulled down | | | 0855 turned the three furnace |
| | | | Photo 6/1/93 |

where all gears are conveyed
thru a furnace

Turned hub & plating over

back plating of parts & terminals (electrode)

- Nickel

- Copper

- Tin

& Solder Pot

Also does some barrel plating.

Unknown Parts, I. E. Sear

box & dispenser for A mill
chaff in airplanes

No gold plating done at this time

0907 AM meet with Jeff Latsch to

discuss in detail the mount.

processor and water generated -

Phil C. Withers

4

Plating

Start with Powder

- Ni Solution (proprietary)

- 7th "

- Copper "

- Passivation - eliminates all the
free iron out of steel

- Back stripping of plated parts,
& barrel soldering

Chemicals used H₂SO₄, HCl,

Phosphoric Acid, Boric Acid,

Sulfamic Acid, Alkaline solid

liquid, NaOH, Ammon. Hydroxide,

KMnO₄ & proprietary solutions

Plating baths are acid in nature

- Electrolytic & E. battery driven

Plating, Tin & Copper are electrolytic.

All plating waste is drummed

up. Closed loop system. All

lines are dead change lines.

Phil C. Withers

6

Some of the Nickel & Copper Strip is wrapped in Evaporation Tank, (280 gallons in size). Nickel the material in the evaporator tank, EPA code: F006 and are in metal recovery program at CP Dorganes in St. Charles, Illinois.

No cyanide are in the process. Nickel plating is done on some components before heating (1800 °F).

So in some cases after the glass seal the part is unwashed in the metal shop. Plating is the best option. Floor drain flow into a dead end sump, which discharges to City's main sewer.

TSP's using PCI for iron

Organics → T, 1, 1 - TCA & Methanol, & MEK, NON HAZ (Solvent 150).

David C. White

7

Degreaser (ultrasonic) are used to clean electronic substrate using 1,1,1-TCA & 1 vapor degreaser.

An environmental agreement was made by Gabriel Laboratories. Stacked plating in about 1981. Started doing hand the soldering in 1987, otherwise the process haven't changed.

In the past ~~had~~ had gold & copper cyanide plating. Eliminated the cyanide plating in 1985.

(Cyanide both solvent & strip solution)

FWD Disposition with Jeff & start visit visit plating room.

12-15, 110 gpd discharged to City

WWSR. 150 gallons of plating floor drain effluent.

(No contact with water & Sanitary making the room in a minimum)

When concrete cooling water is used for the 3 tunnels.

Lab water are mixed in

with existing wastewater. No

lab water is added.

In wastewater, poor picked of organic stuff.

0940 Photo 1 of Atmosphere Evaporator (Summer) SW

Exposure, made of steel & electric components

All drippings are stored daily in the 150 gallon holding tank

0942 Photo 2. Photo of storage area for piping left handings, SW

Exposure. Concrete, (without membrane epoxy sealed tanks)

Also visible steam or odors from storage tanks

9

Concrete Manureyard

around the piping area.

Eight inch berm surrounds

whole piping room and

is 4 inch down surrounding the new

existing piping depth area

cutting down storage area (DSA)

Levee (land) is between the

two lower down storage areas.

Concrete floor. Cuts

present in concrete, concrete is epoxy sealed

various Photo 3. SW

Exposure of DSA

1 down MS SW (F000)

2 down KNO₃ (F002) alkali

2 HNO₃ 2000H₂O

4 down Concrete strip (F000)

1 down MS (F005)

All waste stored low down

1 down Ep/strip (F000)

40 days.

6 drums of pentabond

lapping oil

1 drum water cleaner & lapping oil
(Citrus based cleaner)

Has water storage and: there

are no fire controls or door to
contain spills. Sprinkler system

is about 30' above the

D5A.

0950 hrs. Photo 4 NW Photograph

of D5A showing pen barrier

down. D5A is NW exposure

compared gas cylinder gas all

on west side of D5A. NW

compared gas cylinder on the

east end by beaching deck.

No other drums are in area.

Spud C. W. White

10

0958 hrs. North storage

area was PCFA cleared

in 1985. Currently well

for storage of low volatile

oil only & hot water

looping photographs of

North. Former high D5A floor

Northwest floor cleared. Concrete

exposed. Missing walls with venting

Unrecovered floors, epoxy sealed.

Wall top 1' away entry to 8" sunken floor

1001 hrs. Photograph of floor

South D5A. Ventilation, South southeast

exposed. Concrete floor 12" Sunken floor

in concrete floor. About

for 8' inch sunken floor. NO floor drains

1002 hrs. Sunken floor storage tank.

Storage tank with steel is

part of Currier D5A.

Spud C. W. White

11

13

Wed to clean pipes after

They are fixed

| | |
|----------|-------------------------------------|
| 10/17/83 | Sit down with Jeff L. & discuss 1st |
|----------|-------------------------------------|

| | | | |
|------|-----|-------------|-------|
| 1622 | End | 0837 - 1000 | 12/20 |
|------|-----|-------------|-------|

meeting with Jeff LaSchi

Johnson, Lavie Robert

3. $W_{\text{water}} + c_{\text{calm}} \times \text{allcast}$, about 4% of

Sargent, Dec. 1904 and

Sequent is a verb (sting mamma, fegam
(Platonic only))

Electric started about 1880 -

W. C. Clemen

CF Page
Franklin D. Roosevelt is a great man